What is claimed:

1. A transgenic plant comprising an expression cassette comprising a promoter operably linked to a ferulic acid esterase encoding polynucleotide.

2. The plant of claim 1, wherein the polynucleotide is derived from *Aspergillus niger*.

3. The plant of claim 2, wherein the polynucleotide is FAE ! from *Aspergillus niger*.

4. The plant of claim 3, wherein the polynucleotide encodes a ferulic acid esterase with an altered glycosylation site.

5. The plant of claim 3, wherein the polynucleotide encodes a ferulic acid esterase with a substitution so that glycosylation is altered.

6. The plant of claim 3, wherein the polynucleotide further comprises a polynucleotide that encodes CTWPVAAA at the 3' end.

7. The plant of claim 3 wherein sub-optimal codons are modified to *Triticum spp.* preferred codons.

8. The plant of claim 1, wherein the introduction of the ferulic acid esterase polynucleotide into the plant is by sexual reproduction.

9. The plant of claim 1, wherein the promoter is an inducible promoter.

10. The plant of claim 9, wherein the promoter is a senescence promoter.

11. The plant of claim 9, wherein the promoter is a heat shock promoter.

12. The plant of claim 1, wherein the promoter is a constitutive promoter

13. The plant of claim 1, wherein the expression cassette further comprises a polynucleotide sequence that targets expression of the

polynucleotide.

14. The plant of claim 13, wherein the polynucleotide sequence is upstream of the N-terminus of the ferulic acid esterase polynucleotide.

15. The plant of claim 14, wherein the polynucleotide is derived from the signal sequence of a vacuolar targeted gene

16. The plant of claim 15, wherein the targeted gene is a barley aleurain gene.

17. The plant of claim 15, wherein the vacuolar signal sequence of the polynucleotide is modified to produce a endoplasmic reticulum or apoplast signal sequence.

18. The plant of claim 15, wherein the polynucleotide is derived from the signal sequence of a vacuolar targeted senescence gene.

19. The plant of claim 18, wherein the senescence gene is a Lolium *See1* signal sequence.

20. The plant of claim 13, wherein the polynucleotide is derived from the signal sequence of a golgi targeted gene.

21. The plant of claim 20, wherein the targeted gene is a rat sialyl transferease signal sequence.

22. The plant of claim 13, wherein the polynucleotide is derived from the signal sequence of an apoplast signal sequence.

23. The plant of claim 22, wherein the signal sequence is from *Aspergillus niger* ferulic acid esterase.

24. The plant of claim 16, wherein the polynucleotide is derived from *Solanum tuberosum.*

25. The plant of claim 13, wherein the polynucleotide sequence is downstream of the C-terminus of the ferulic acid esterase polynucleotide

26. The plant of claim 25, wherein the polynucleotide sequence is a KDEL sequence.

27. The plant of claim 25, wherein the polynucleotide sequence is a stop codon.

28. The plant of claim 25, wherein the polynucleotide sequence is an extension of the ferulic acid esterase reading frame to provide a linker to KDEL.

29. The plant of claim 1, further comprising introduction into the plant a second expression cassette comprising a promoter operably linked to a xylanase encoding polynucleotide.

30. The plant of claim 29, wherein the xylanase encoding polynucleotide is from *Trichoderma reesei*.

31. The plant of claim 29, wherein the first and second expression cassettes are present on separate plasmids.

32. The transgenic plant of claim 1, selected from the group consisting of Festuca, Lolium, Zea and Avena.

33. The transgenic plant of claim 32, wherein the plant is a Festuca plant.

34. A method of controlling the level of phenolic acids in plant cell walls of a transgenic plant, the method comprising introducing into the plant an expression cassette comprising a promoter operably linked to a ferulic acid esterase encoding polynucleotide.

35. The method of claim 34, wherein the polynucleotide is derived from *Aspergillus niger*.

36. The method of claim 35, wherein the polynucleotide is a FAE 1 gene from *Aspergillus niger*.

37. The method of claim 36, wherein the polynucleotide encodes the ferulic acid esterase with an altered glycosylation site.

38. The method of claim 36, wherein the polynucleotide encodes the ferulic acid esterase with a substitution such that glycosylation is altered.

39. The method of claim 36, wherein the polynucleotide

comprises CTWPVAAA at the 3' end.

40. The method of claim 36 wherein sub-optimal codons are modified to *Triticum spp.* preferred codons.

41. The method of claim 36, wherein the polynucleotide comprises SEQ ID NO:1.

42. The method of claim 34, wherein the introduction of the ferulic acid esterase polynucleotide into the plant is by transformation of cell cultures.

43. The method of claim 42, wherein the cell cultures are regenerated to plants.

44. The method of claim 34 wherein the ferulic acid esterase polynucleotide is introduced into the plant by sexual reproduction.

45. The method of claim 34, wherein the transgenic plant is a member of a genus selected from the group consisting of Festuca, Lolium, Avena and Zea.

46. The method of claim 45, wherein the transgenic plant is a member of the genus Festuca.

47. The method of claim 46, wherein the transgenic plant is a *Festuca arundinacea.*

48. The method of claim 34, wherein the promoter is an inducible promoter.

49. The method of claim 48, wherein the promoter is a senescence promoter.

50. The method of claim 48, wherein the promoter is a heat shock protein promoter.

51. The method of claim 34, wherein the promoter is a constitutive promoter.

52. The method of claim 51, wherein the promoter is an actin

promoter.

53. The method of claim 34, wherein the expression cassette further comprises a polynucleotide sequence that targets expression of the polynucleotide.

54. The method of claim 53, wherein the polynucleotide sequence is upstream of the N-terminus of the ferulic acid esterase polynucleotide.

55. The method of claim 54, wherein the polynucleotide is derived from the signal sequence of a vacuolar targeted gene.

56. The method of claim 55, wherein the targeted gene is a barley aleurain gene.

57. The method of claim 55, wherein the polynucleotide is derived from the signal sequence of a Lolium See1 signal sequence.

58. The method of claim 55, wherein the vacuolar signal sequence of the polynucleotide is modified to produce a endoplasmic reticulum signal sequence.

59. The method of claim 55, wherein the vacuolar signal sequence of the polynucleotide is modified to produce an apoplast signal sequence.

60. The method of claim 54, wherein the polynucleotide is derived from the signal sequence of a golgi targeted gene.

61. The method of claim 60, wherein the targeted gene is a rat sialyl transferease signal sequence.

62. The method of claim 59, wherein the polynucleotide is derived from the signal sequence of a fungal apoplast signal sequence.

63. The method of claim 62, wherein the signal sequence is from *Aspergillus niger* ferulic acid esterase.

64. The method of claim 59, wherein the apoplast signal

sequence is from a potato.

65. The method of claim 53, wherein the polynucleotide sequence is downstream of the C-terminus of the ferulic acid esterase polynucleotide

66. The method of claim 65, wherein the polynucleotide sequence is a KDEL sequence.

67. The method of claim 65, wherein the polynucleotide sequence is a stop codon.

68. The method of claim 65, wherein the polynucleotide sequence is an extension of the ferulic acid esterase reading frame to provide a linker to KDEL.

69. The method of claim 34, further comprising simultaneous introduction into the plant a second expression cassette comprising a promoter operably linked to a polynucleotide encoding a xylanase gene.

70. The method of claim 69, wherein the second polynucleotide is a fungal xylanase.

71. The method of claim 70, wherein the fungal xylanase is from *Trichoderma reesei*.

72. The method of claim 35, wherein the first and second expression cassettes are present on separate plasmids.

73. The method of claim 1, wherein the first and second expression cassettes are present on separate plasmids.

74. A transgenic plant produced by the method of claim 34.